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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,660	09/05/2000	Stephen R. Carter	6647-17	8081

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EXAMINER	
LEZAK, ARRIENNE M	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/654,660	CARTER ET AL.	
	Examiner	Art Unit	
	Arrienne M. Lezak	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-11,13-16 and 21-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-11,13-16 and 21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11.17.04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Examiner notes that no Claims have been amended, Claims 6, 12 & 17-20 have been cancelled and Claims 27-32 have been added. All claims not explicitly addressed herein are found to be addressed within prior Office Action dated 2 September 2004 as reiterated herein below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 7 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,078,953 to Vaid in view of US Patent US 6,513,031 B1 to Fries.

3. Regarding Claims 1, 7 and 13, Vaid discloses a computer-implemented method, medium and apparatus for enforcing policy over a computer network, the method comprising: defining a template; assigning a policy to the computer network; monitoring a content stream on the computer network; and enforcing the policy when the content stream is within a threshold distance of the template, (Col. 16, lines 18-63; Fig. 3; and Fig. 8).

4. Vaid does not specifically disclose a template including a "first subset of vectors in a topological vector space including at least one vector not in the template" and

monitoring a content stream "to construct an impact summary including a second set of the vectors in the topological vector space" for enforcing the policy when the impact summary is within a threshold distance of the template.

5. Fries discloses a "system for improving search area selection", (Col. 1, lines 66-67; Col. 2, lines 1-26; Cols. 11-14; Cols. 16, 17, 21, 22; and Col. 28, lines 29-56) which includes a "support vector machine" and querying using "semantic bits", (Col. 20, lines 58-67 & Col. 21, lines 1-59). It would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to combine the teachings of Vaid and Fries. The motivation to combine lies in the fact that Vaid teaches a traffic management tool and Fries teaches an improvement/advantage on that tool in the form of a search optimization.

6. Examiner further finds said amended language to be narrowing in nature, as Applicant's original claim language, as interpreted by Examiner at time of examination, enumerates the use of a template generally, which Vaid clearly reads upon. To further narrow the nature of said template is also found to narrow the nature of said claims. That said, regarding Claims 1, 7 and 13, Applicant asserts that the template of Vaid is based on the notion of classes and therefore does not read upon the template of the Applicant which is based on the notion of a vector which defines a threshold.

7. Examiner finds that bandwidth limits, (Col. 16, lines 53-55), as incorporated into the template of Vaid in fact reads upon "the content is compared to a set of vectors, (which form a template), to determine the distance, (threshold), between the content and the template", as defined by Applicant, (2.17.04 Amendment: p. 7, lines 8-12).

Further, the notion of being "greater than" or "less than" reads on a mathematical formula, (Amendment: p. 7, lines 8-12). It would have been obvious to a person having ordinary skill in the art at the time of invention by Applicant to define a template by a set of vectors within a network wherein policies are used to improve quality of service, as noted within Vaid, (Col. 16, lines 50-63). The motivation to combine is suggested by Vaid, which teaches the application of bandwidth-based functions and modifications, alternatives and variations thereof. Thus, Claims 1, 7 and 13 are found to be unpatentable under the combined teachings of Vaid in view of Fries.

8. Regarding Claims 2 and 8, Vaid in view of Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method, medium and apparatus wherein assigning a policy includes assigning a policy to limit bandwidth on the computer network for content in the content stream within the threshold distance of the template, (Col. 4, lines 29-32 and Col. 6, lines 39-63). Thus, Claims 2 and 8 remain unpatentable in view of Vaid.

9. Regarding Claims 3 and 9, Vaid in view of Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method, medium and apparatus wherein assigning a policy includes assigning a policy to limit access to a document on the computer network within the threshold distance of the template, (Col. 7, lines 30-50 – incl. Table 2; Col. 8, lines 1-34). Thus, Claims 3 and 9 remain unpatentable in view of Vaid.

10. Regarding Claims 4, 10, 14 and 15 Vaid in view of Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method,

medium and apparatus wherein monitoring a content stream includes monitoring metadata of the content stream, (Col. 17, lines 8-50; Col. 19, lines 54-55; and Col. 20, lines 1-2). Thus, Claims 4, 10, 14 and 15 remain unpatentable in view of Vaid.

11. Claims 5, 11 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,078,953 to Vaid in view of US Patent US 6,513,031 to Fries in further view of US Patent 5,276,677 to Ramamurthy. Vaid in view of Fries is relied upon for those teachings disclosed herein. However, Vaid does not specifically disclose or describe the monitoring of a content stream comprising monitoring a portion of the content stream on the computer network; and extrapolating how close the entire content stream is to the template from the portion of the content stream, (as required by pending Claims 5, 11 and 16).

12. Ramamurthy ('677) discloses a predictive congestion control of high-speed wide area networks comprising extrapolation and summary methods, (Abstract and Col. 11, lines 6-25).

13. To incorporate the traffic control extrapolation and impact summary methods from Ramamurthy into the Vaid quality of service monitoring system would have been obvious to one of ordinary skill in this art at the time of invention by applicant, as noted within Vaid, (Col. 18, lines 46-64). Vaid discloses the use of congestion, utilization and performance degradation reports for purposes of day-to-day troubleshooting and justification and validation of policy decisions. It would be obvious to conform such reports to include extrapolation and impact summary functionalities, as they would further serve to necessitate evaluation of the affected service.

14. Thus, Claims 5, 11 & 16 are unpatentable over the combined teachings of Vaid in view of Fries in further view of Ramamurthy.

15. Regarding Claims 21-26, Vaid in view of Fries in further view of Ramamurthy is relied upon for those teachings disclosed herein. Fries further discloses a method, program and apparatus wherein enforcing the policy includes: measuring a distance between the impact summary and the template (using a Hausdorff distance function – per pending Claims 22, 24 & 26); and enforcing the policy if the distance is less than the threshold distance, (Col. 20, lines 58-67, Col. 21; and Col. 22, lines 1-24), (Examiner notes that as Fries teaches the use of a distance measurement, the use of the Hausdorff distance function would have been obvious). Thus, Claims 21-26 are unpatentable over the combined teachings of Vaid in view of Fries in further view of Ramamurthy.

16. Regarding Newly Added Claims 27-32, Vaid in view of Fries in further view of Ramamurthy is relied upon for those teachings disclosed herein. Fries further discloses a support vector machine which generates a goal vector space by converting each set of features into a vector in the goal vector space, which goal vector space is then divided by a set of goal surfaces based on the goals identified for each training vector, (col. 20, lines 58-67; Col. 21; & Col. 22, lines 1-24). Examiner finds that as "each set of features" is converted into a vector in the goal space, obviously more than one vector is generated per each goal vector space. Thus, Newly Added claims 27-32 are also unpatentable over the combined teachings of Vaid in view of Fries in further view of Ramamurthy.

Response to Arguments

17. Applicant's arguments filed 3 November 2004, have been fully considered but they are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Examiner respectfully disagrees with Applicant's argument pertaining to semantic interpretations, noting that Fries does indeed disclose a goal vector defined by multiple vectors. Moreover, Fries discloses a comparison means by which a query's goal vector is measured against each of the goal surfaces in the goal space.

18. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner notes further that Applicant has not argued Vaid in view of Fries in further view of Ramamurthy as the combination pertains to the rejected claims. In fact, Examiner notes no mention whatsoever of Ramamurthy within the amendment.

19. In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner disagrees with Applicant's assertion finding that Fries teaches an improved traffic management tool by incorporating a means by which users are able to identify which search engines they should be using to optimize their search. In optimizing their search, the user will obviously require less bandwidth, allowing for decreased network congestion.

20. Regarding Applicant's argument as to Examiner's interpretation of phraseology such as "impact summary" and extrapolation", Examiner reiterates said rejection. Reconsidering the term, "impact summary," the previous rejections were not based on an interpretation of an "impact summary" being based on a set of vectors, since the original claim language did not include this limitation. However, the rejections have been amended to read on a set of vectors (Vaid upon further consideration of Vaid) as noted herein. The new rejections thus now encompass an amendment for "impact summary" to be interpreted in terms of a set of vectors. Regarding the term, "extrapolation," Ramamurthy states, "... from this can be estimated the total controlled traffic that can be expected in frames (n+1) and (n+2)..." (Ramamurthy: Col. 11, lines 22-25). As an "estimation" is being done from frames n and less in order to predict what the expectation of frames (n+1) and (n+2) will be, this in fact reads upon extrapolation. Since the claim language does not explicitly state that extrapolation is to be accomplished via analysis of the impact summary, the claims may be broadly but

reasonably interpreted to read on "extrapolation." Moreover, Examiner reiterates that although claims are to be read in light of the specification, limitations from the specification are not to be read into the claims.

21. Thus, as Examiner has completely addressed Applicant's amendment, and finding Applicant's arguments do not show how Applicant's amendment avoids such references or objections, Examiner hereby maintains the rejection of all previously stated claims in addition to newly added claims, as noted herein above. Examiner further notes that the "confusing" wording in the previous office action has been modified as noted herein above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arrienne M. Lezak
Examiner
Art Unit 2143

AML

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